

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspin.gov.

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

05/31/2002

JACOBSON, PRICE, HOLMAN & STERN, LLC THE JENIFER BUILDING 400 SEVENTH STREET, N.W. WASHINGTON, DC 20004 EXAMINER

GHAYOUR, MOHAMMAD H

ART UNIT CLASS-SUBCLASS

2634 375-141000

DATE MAILED: 05/31/2002

10

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767.953	03/27/2001	Seung Chan Bang	P63083US1	2843

TITLE OF INVENTION: ORTHOGONAL COMPLEX SPREADING METHOD FOR MULTICHANNEL AND APPARATUS THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$640	\$300	\$940	09/03/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Gy.



# PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

<u>Fax</u> (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

maintenance fee notification	S.	•			ess; and/or (b) indicating a sepa		
	90 05/31/2002 ICE, HOLMAN &		Block 1)	Fee(s) Transmitt accompanying pa	e of mailing can only be used for al. This certificate cannot be spers. Each additional paper, so sust have its own certificate of m	oe used for any other uch as an assignment or	
THE JENIFER BU 400 SEVENTH ST WASHINGTON, D			Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited United States Postal Service with sufficient postage for first class menvelope addressed to the Box Issue Fee address above, or being it transmitted to the USPTO, on the date indicated below.				
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						(Signature	
						(Date	
APPLICATION NO.	FILING DATE	FIRS	T NAMED INVEN	ГOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/767,953 FITLE OF INVENTION: OI	03/27/2001 RTHOGONAL COMPLE		Seung Chan Bang OD FOR MULTIO		P63083US1 PPARATUS THEREOF	2843	
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nonprovisional	125	\$640		\$300	\$940	09/03/2002	
EXAMIN	ER	ART UNIT	CLASS-SUBCL	.ASS			
GHAYOUR, MOI	HAMMAD H	2634	375-14100	0			
1. Change of correspondence CFR 1.363).	e address or indication of	"Fee Address" (37	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys				
☐ Change of corresponder Address form PTO/SB/12		Correspondence	single firm (ha	alternatively, (2) ti ving as a member	r a registered		
U "Fee Address" indication PTO/SB/47) attached. Use	on (or "Fee Address" India	ation form is required.	attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME AND	PESIDENCE DATA TO	RE PRINTED ON THE	PATENT (print o	r time)	<del> </del>		
	assignee is identified be o the USPTO or is being	low, no assignee data wi submitted under separate	ll appear on the p cover. Completion	•• •	assignee data is only appropriate of a substitute for filing an assign OUNTRY)	e when an assignment has nment.	
Please check the appropriate	assignee category or cate	gories (will not be printed	l on the patent)	<b>⊔</b> individual =	■ corporation or other private gr	oup entity 🚨 government	
la. The following fee(s) are e	enclosed:	4b. Pay	ment of Fee(s):				
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☐ Publication Fee							
Advance Order - # of Co	pies	Deposit	t Account Number	ereby authorized by	y charge the required fee(s), or cr (enclose an extra copy of this f	redit any overpayment, to orm).	
Commissioner for Patents is	requested to apply the Issu	e Fee and Publication Fe	ee (if any) or to re	apply any previous	sly paid issue fee to the application	on identified above.	
Authorized Signature)	-	(Date)	,				
NOTE; The Issue Fee and other than the applicant; a interest as shown by the rec	registered attorney or a	gent; or the assignee or	rother party in				
This collection of informat obtain or retain a benefit by application. Confidentiality estimated to take 12 minute completed application form case. Any comments on the suggestions for reducing the Patent and Trademark Office NOT SEND FEES OR Commissioner for Patents,	y the public which is to is governed by 35 U.S.C. is to complete, including a to the USPTO. Time vertee amount of time you is burden, should be see, U.S. Department of COMPLETED FORMS	file (and by the USPTC 122 and 37 CFR 1.14. T gathering, preparing, and will vary depending upor require to complete the to the Chief Informatic	to process) and his collection is a submitting the name the individual is form and/or on Officer. U.S.				

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## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspta.gov

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09/767,953	03/27/2001	Seung Chan Bang	P63083US1	2843	
75	90 05/31/2002		EXAMIN	ER	
JACOBSON, PRICE, HOLMAN & STERN, LLC			GHAYOUR, MOHAMMAD H		
	HE JENIFER BUILDING 00 SEVENTH STREET, N.W.			PAPER NUMBER	
WASHINGTON, I	OC 20004		2634	10	
			DATE MAILED: 05/31/2002	•	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

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	Application N	lo.	Applicant(s)	
	09/767,953 BANG ET AL.			
Notice of Allowability	Examiner		Art Unit	
	Mohammad H	Ghayour	2634	
The MAILING DATE of this communication at All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOLNOTICE OF ALLOWABILITY IS NOT A GRANT OF PATEN of the Office or upon petition by the applicant. See 37 CFR 1.	S IS (OR REMAINS) -85) or other approp I <b>T RIGHTS</b> . This ap	CLOSED in this priate communicate polication is subjected in the communication is subjected in the communication in the communication is subjected in the communication in the co	application. If not includition will be mailed in due	ded e course. <b>THIS</b>
1. X This communication is responsive to 5/20/2002.				
2. X The allowed claim(s) is/are 41-97 (renumbered as 1-5)	7, respectively).			
3. $igotimes$ The drawings filed on 3/27/2001 are accepted by the E	Examiner.			
<ol> <li>Acknowledgment is made of a claim for foreign priority</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ol>	under 35 U.S.C. §	119(a)-(d) or (f).		
<ol> <li>Certified copies of the priority documents to</li> </ol>	have been received.			
<ol><li>Certified copies of the priority documents t</li></ol>	have been received	in Application No	· ·	
<ol><li>Copies of the certified copies of the priority</li></ol>	y documents have b	een received in th	nis national stage applic	ation from the
International Bureau (PCT Rule 17.2(a)	)).			
* Certified copies not received:				
<ol> <li>Acknowledgment is made of a claim for domestic priori</li> </ol>	ity under 35 U.S.C. {	§ 119(e) (to a pro	visional application).	
(a) The translation of the foreign language provision				
6. Acknowledgment is made of a claim for domestic priori	ity under 35 U.S.C. §	§§ 120 and/or 12 <sup>4</sup>	1.	
Applicant has THREE MONTHS FROM THE "MAILING DATE below. Failure to timely comply will result in ABANDONMEN"				
7. A SUBSTITUTE OATH OR DECLARATION must be s INFORMAL PATENT APPLICATION (PTO-152) which gives	submitted. Note the a reason(s) why the o	attached EXAMIN ath or declaration	IER'S AMENDMENT or n is deficient.	NOTICE OF
8. CORRECTED DRAWINGS must be submitted.				
(a) ☐ including changes required by the Notice of Drafts	sperson's Patent Dra	awing Review ( P	TO-948) attached	
1) hereto or 2) to Paper No	•	•	,	
(b) ☐ including changes required by the proposed draw	ing correction filed	, which ha	s been approved by the	Examiner.
(c) including changes required by the attached Exam	iner's Amendment /	Comment or in the	ne Office action of Pape	r No
Identifying indicia such as the application number (see 37 Cl of each sheet. The drawings should be filed as a separate page 25.				
9.  DEPOSIT OF and/or INFORMATION about the deattached Examiner's comment regarding REQUIREMENT FO				Note the
Attachment(s)				
1 Notice of References Cited (PTO-892)	2	2☐ Notice of Info	rmal Patent Application	(PTO-152)
3 Notice of Draftperson's Patent Drawing Review (PTO-948	8) 4	4⊠ Interview Sur	mmary (PTO-413), Pape	•
5 Information Disclosure Statements (PTO-1449), Paper N		_	mendment/Comment	A.11
7 Examiner's Comment Regarding Requirement for Depos of Biological Material		B∐ Examiner's S B∐ Other .	tatement of Reasons fo	r Allowance

Application/Control Number: 09/767,953

Art Unit: 2634

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Yoon S. Ham on 5/29/2002.

The application has been amended as follows: in claims 63 and 64, line 1, replace "57" with -60--.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad H Ghayour whose telephone number is (703) 306-3034. The examiner can normally be reached on M-TH, 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Application/Control Number: 09/767,953

Art Unit: 2634

Mohammad Ghayour May 30, 2002

PRIMARY EXAMINED